

METHOD AND APPARATUS TO IDENTIFY SMALL VARIATIONS OF BIOMOLECULES

ABSTRACT OF THE DISCLOSURE

Many diseases are related to variations in the genetically specified structure of proteins synthesized by cells. Genetic engineering is now able to identify the structural variations and to introduce new genes to synthesize more healthful proteins, but it is difficult actually to identify the specific protein or chemical variants in bodily fluids and extracts of tissues in order to diagnose diseases and to assess the effects of treatment. This invention provides apparatuses and methods which allow a user to finely discriminate between small variations in the structure, function and levels of specific biochemicals even when admixed with other biochemicals.